

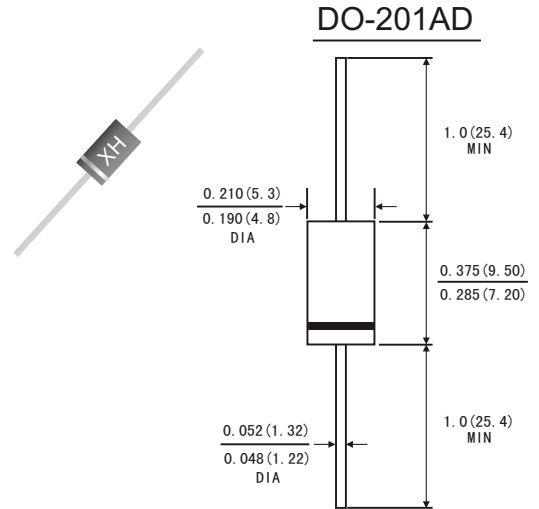


FEATURES

- The plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High surge current capability
- 3.0A operation at $T_L=75^{\circ}\text{C}$ with no thermal runaway
- Typical I_R less than $0.1\mu\text{A}$
- High temperature soldering guaranteed: $260^{\circ}\text{C}/10$ seconds at terminals
- $0.375''(9.5\text{mm})$ lead length, 5lbs. (2.3kg) tension
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case:* JEDEC DO-201AD molded plastic body
- *Terminals:* Lead solderable per MIL-STD-750, method 2026
- *Polarity:* Color band denotes cathode end
- *Mounting Position:* Any
- *Weight:* 0.042ounce, 1.19 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz.,resistive or inductive load. For capacitive load, derate by 20%.)

	Symbols	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts	
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	Volts	
Maximum DC Blocking Voltage to $T_A=105^{\circ}\text{C}$	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts	
Maximum average Forward Rectified Current $0.5''(12.5\text{mm})$ lead length at $T_L=105^{\circ}\text{C}$	$I_{(AV)}$	3.0									Amps	
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method))	I_{FSM}	200.0									Amps	
Maximum Instantaneous Forward Voltage at 3.0 A	V_F	1.0									Volts	
Maximum Reverse current at rated DC Blocking Voltage	$T_a = 25^{\circ}\text{C}$ $T_a = 100^{\circ}\text{C}$	I_R									10.0	μA
											100.0	
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40.0									$^{\circ}\text{C}/\text{W}$	
Typical Junction Capacitance (Note 1)	C_J	50.0									pF	
Maximum Full Load Reverse Current, Full Cycle Average .375'' (9.5mm) Lead Length @ $T_L=75^{\circ}\text{C}$	HTIR	30									μA	
Operating and Storage temperature Range	T_J T_{STG}	-65 to +150									$^{\circ}\text{C}$	

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient and from junction to lead at $0.375''(9.5\text{mm})$ lead length , P.C.B. mounted



FIG.1-FORWARD CURRENT DERATING CURVE

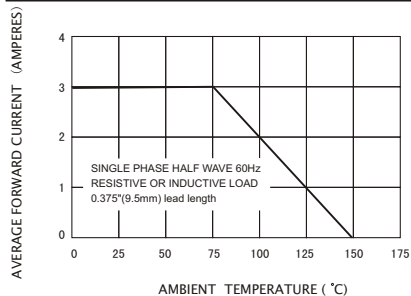


FIG.2-TYPICAL INSTANTANEOUS FORWARD VOLTAGE.(V)

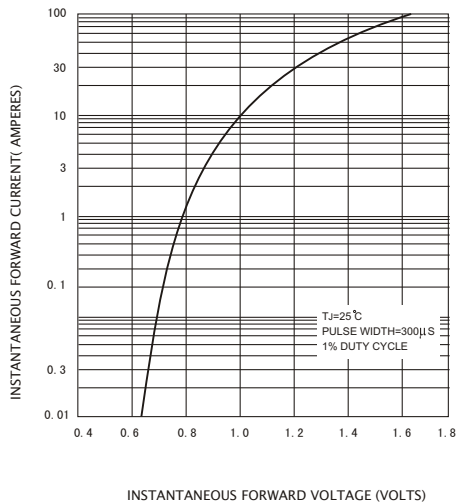


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

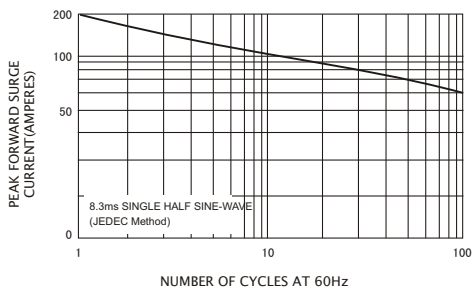


FIG.4-TYPICAL REVERSE CHARACTERISTICS

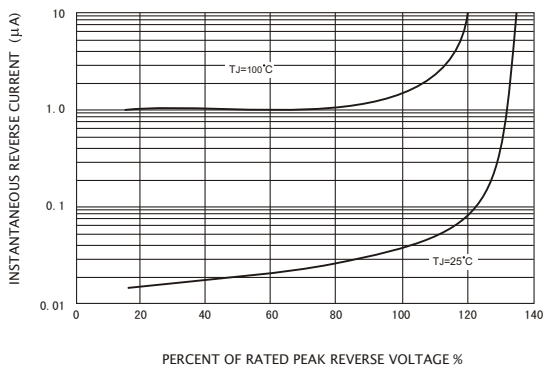


FIG.5-TYPICAL JUNCTION CAPACITANCE

